

WHAT IS CLAIMED IS:

1. An optical disc medium of a disc-shaped on which a spiral-shaped recording track is formed, said optical disc medium comprising a data recording area and a system information recording area which are set thereon with said optical disc medium divided in a radial direction thereof, wherein recording density of information on said system information recording area is lower than that of data on said data recording area.

2. The optical disc medium as claimed in claim 1, wherein said system information recording area lies in an inner peripheral side of said optical disc medium.

3. The optical disc medium as claimed in claim 1, wherein said system information recording area has a shortest pit length which is substantially integer times as large as that of said data recording area.

4. The optical disc medium as claimed in claim 1, wherein said system information recording area has specific recoding density and is set in particular radial positions of said optical disc medium,

said optical disc medium being one of three types of an exclusively reproduction type, an additionally recordable type, and a rewritable type,

specific information being recorded on said system information recording area, the specific information being information for specifying that said optical disc medium is one of said three types.

5. The optical disc medium as claimed in claim 1, wherein said data recording area has a shortest pit length $L1$ of data to be recorded or reproduced that satisfies a relationship of $L1 < 0.35 \times \lambda / NA$, where λ represents a wavelength of a light source for using recording/reproducing and NA represents a numerical aperture of an object lens, and said data recording area has a PSRSNR value defined by quality evaluation index in a partial-response maximum-likelihood (PRML) that is not less than fourteen;

said system information recording area having a shortest pit length L_2 of data to be exclusively reproduced that satisfies a relationship of $L_2 > 0.50 \times \lambda / NA$; and

5 said system information recording area having a track pitch which is wider than that of said data recording area.

6. The optical disc medium as claimed in claim 5, wherein said system information recording area lies in an inner peripheral side of said optical disc medium.

10 7. The optical disc medium as claimed in claim 5, wherein said system information recording area has a shortest pit length which is substantially integer times as large as that of said data recording area.

8. The optical disc medium as claimed in claim 5, wherein said system information recording area has specific recording density and is set in particular radial positions of said optical disc medium,

15 said optical disc medium being one of three types of an exclusively reproduction type, an additionally recordable type, and a rewritable type,

specific information being recorded on said system information recording area, the specific information being information for specifying that said optical disc medium is one of said three types.

20 9. An optical disc apparatus for recording or reproducing data in an optical disc medium comprising a data recording area and a system information recording area which are set thereon with said optical disc medium divided in a radial direction thereof, recording density of information on said system information recording area being lower than that of data on said data recording area, wherein said optical disc apparatus comprises:

rotating means for rotating said optical disc medium;

an optical head for carrying out reproduction of information from the rotating optical disc medium to produce a reproduced signal;

a binary equalizing circuit for binary equalizing the reproduced signal

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when said optical head positions over said system information recording area;
and

5 a partial-response maximum-likelihood (PRML) circuit for partial-response equalizing the reproduced signal when said optical head positions over said data recording area.

10 10. The optical disc apparatus as claimed in claim 9, wherein said data recording area has a shortest pit length L1 of data to be recorded or reproduced that satisfies a relationship of $L1 < 0.35 \times \lambda / NA$, where λ represents a wavelength of a light source for using recording/reproducing and NA represents a numerical aperture of an object lens, and said data recording area having a PSRSNR value defined by quality evaluation index in the PRML that is not less than fourteen;

15 said system information recording area having a shortest pit length L2 of data to be exclusively reproduced that satisfies a relationship of $L2 > 0.50 \times \lambda / NA$; and

said system information recording area having a track pitch which is wider than that of said data recording area.